

BASIS STATEMENT  
Chapter 543, “Rules to Control the Subsurface Discharge of Pollutants”

This rule repeals and replaces the existing Chapter 543 originally adopted in 1983. The statutory authority for this rule is contained in Title 38, Section 413(1-B), Waste discharge licenses; License required for subsurface wastewater disposal systems. Pursuant to Section 1422 of the Safe Drinking Water Act, the State of Maine has held primary enforcement responsibility to administer the Underground Injection Control (UIC) Program in Maine since 1983. Maine is required to have rules (Chapter 543) that meet or exceed the minimum Federal requirements (as codified at 40 CFR Parts 144 and 146) to maintain primary responsibility for the UIC Program. 40 CFR 145.32(e) requires state programs to revise both their primacy application and any applicable rules when EPA revises or adds any requirement respecting an approved UIC program. This rulemaking action was undertaken in response to EPA changes to the UIC program published in the Federal Register on December 7, 1999 (64 FR 68546).

On June 15, 2006, this rule was posted to rulemaking with the Board of Environmental Protection. On June 28, 2006, public notice of the opportunity to comment on the draft rule was published. Prior to June 28, notice of the opportunity to comment on the draft rule was provided to all persons requesting notice of DEP rulemaking activities, all persons requesting notice of this rulemaking in particular, all municipal Licensed Plumbing Inspectors, and all municipal Code Enforcement Officers. Notice was also posted on the DEP website. The comment period on the draft rule remained open until July 28, 2006. On July 27, 2006, the Department received correspondences from the Maine Rural Water Association (MRWA) and the Maine Automobile Dealers Association (MADA) commenting on the draft rule and requesting a public hearing. Comments from MRWA and MADA and the Department’s responses are summarized below.

Maine Rural Water Association Comments:

*Comment 1:* MRWA requests “a public hearing to discuss the consequences of the Departments proposed changes to the UIC Rules (Chapter 543) for public water supplies”.

*Response 1:* The draft rule repeals and replaces Maine’s original Chapter 543, which was adopted in 1983. The Department has historically administered its UIC program to marry related requirements from Chapter 543 (06-096 CMR 543), the Maine Subsurface Wastewater Disposal Rules (10-144 CMR 241) administered by the Maine Department of Health and Human Services, and the federal UIC rules (40 CFR Part 144) administered by the USEPA. The Department’s program has evolved as requirements in other state and federal rules have changed. In this way, the Department has ensured that facilities could be assured of being in compliance with all applicable rules. This proposed

rulemaking formally codifies this program, integrating the existing requirements of these other programs, and thus presents no new requirements to facilities. Through the UIC program, the Department has conducted approximately 2,500 facility inspections since 1998 all over the State of Maine and has assembled a database of information on approximately 5,800 facilities through extensive outreach efforts, which include mailings of printed program guidance materials, letters, customer surveys, telephone conversations, and site visits. The Department involves municipal officials in every community in which it conducts inspections and has posted UIC program guidance materials on its website. Through these efforts, the Department has achieved a rate of compliance with these rules of approximately 94%. The Department believes that the public is well informed about these rules, that its ongoing outreach efforts assist any members of the public not as informed, and believes that a public hearing is not necessary.

*Comment 2: Section 3, Prohibited Discharges, Section B, Prohibition of movement of fluid into groundwater:* MRWA is concerned that Section 3(B), which prohibits the discharge of pollutants in such a way that they cause or contribute to violations of groundwater, surface water, and drinking water classifications and standards, may impact public water suppliers (PWS).

*Response 2:* Section 3(B) does not create a new prohibition, rather it reflects and reiterates existing Maine law. Pollutants are defined in existing state statute at 38 M.R.S.A., Section 361-A(4-A). Further, 38 M.R.S.A., Section 413(1) states, “*no person may directly or indirectly discharge or cause to be discharged any pollutant without first obtaining a license... from the Department*”. Pursuant to 38 M.R.S.A., Section 414-A, no discharge is permitted to cause or contribute to violations of water classification standards. Section 3(B) lists the citations where applicable classifications and standards can be found. Thus, these requirements, which are designed to ensure protection of Maine’s groundwater resources, are already existing in state law.

*Comment 3: Section 2, Classification of Wells, Section E(2)(d):* MRWA is concerned that Section 2(E)(2)(d) defines “*wells that receive public drinking water treatment plant filter backwash water, except filter backwash from surface water sources with no chemical additions*” as requiring a waste discharge license.

*Response 3:* The Department generally assumes that treatment of water supplies for public consumption is undertaken to remove unhealthy or undesirable properties. Filtration typically results in the concentration of such properties in the filter backwash wastewater. The discharge of filter backwash wastewater to a water of the State constitutes the discharge of pollutants and first requires a waste discharge license, pursuant to 38 M.R.S.A., Section 413(1), cited in Response 2 above. However, the Department excluded backwash from “*surface water sources with no chemical additions*”, as it considered coarse filtering of natural aquatic plants and other aquatic life and debris to present less concern.

*Comment 4: Section 2, Classification of Wells, Section E(11)(c):* MRWA interprets Section 2(E)(11)(c) as requiring drinking water systems to prove that radionuclide concentrations are below levels listed in 10 CFR Part 20, and all other pollutant concentrations are *deminimus* in order to be considered a Class V well. MRWA comments that “*all other pollutants*” is very broad and unclear and asks if PWS discharging sodium at levels above ambient conditions would be considered discharging a pollutant since it is not considered a Primary Contaminant by USEPA? MRWA asks, “*will PWS that are providing safe, healthful water to the public essentially be penalized for filtering out pollutants for human consumption?*”

*Response 4:* Section 2(E)(11)(c) identifies several types of injection wells that can be licensed by rule, the most expedited regulatory process provided. Until recently, longstanding unresolved questions about the fate and transport of radionuclides prohibited authorizing the discharge of wastewaters containing them, even through waste discharge licenses. Pursuant to a multi-agency effort involving the DEP, DHHS Radiation Control Program, and DHHS Drinking Water Program, guidance has been developed to identify safe levels and methods of radionuclide disposal. This effort, which is reflected in the cited section, allows for approval of discharges containing radionuclides at levels below those contained in federal rule 10 CFR Part 20. These levels were developed by the U.S. Nuclear Regulatory Commission and are deemed by Maine’s Radiation Control Program to constitute acceptable levels for release to the environment. It should be noted that there are persistent unresolved questions about radionuclide fate and transport that still affect the ability to issue waste discharge licenses for levels above the 10 CFR Part 20 levels, which are defined as radioactive waste in federal UIC rules.

The definition of pollutant is well established in state law, having existed unchanged since 1973, and can be found at 38 M.R.S.A., Section 361-A(4-A). The Department recognizes that pollutant can be a broad term, representative of the myriad of potential pollutants existing, but does not view the definition as unclear. As discussed in Response 3, the discharge of even naturally occurring elements at concentrations above ambient levels can constitute a discharge of pollutants which requires a waste discharge license pursuant to 38 M.R.S.A., Section 413(1). The Department works with facilities to determine if options other than obtaining a waste discharge license are available, such as elimination of the discharge or connection to either a Publicly Owned Treatment Works (wastewater treatment facility) or to a holding tank for disposal offsite. The Department has issued waste discharge licenses to 2 PWS’ for subsurface discharges and to 13 PWS’ for discharges to surface waters. The purpose of this rule is to ensure that all groundwater in the State of Maine “*shall be free of radioactive matter or any matter that imparts color, turbidity, taste or odor which would impair usage of these waters, other than that occurring from natural phenomena*” and that Class GW-A water “*shall be of such quality that it can be used for public water supplies*”, as established in Maine law, 38 M.R.S.A., Section 465-C, Standards of classification of groundwater.

*Comment 5:* MRWA believes the extent of the proposed rule to be unknown, states that approximately 30 of 400 PWS “*receive at least a portion of their revenues from the municipalities they serve*”, and classifies the Notice of Agency Rule-making Proposal’s statement that “*this rule will not have a fiscal impact on municipalities*” as misleading.

*Response 5:* The Department refers to Responses 1 and 2 above. The Department maintains that this rule does not present a new fiscal impact to municipalities. The requirements of this rule are not new, as Maine adopted its current UIC rule in 1983 and has had an active UIC program since. As noted, the requirements of this rule have a well established history and basis in other state and federal laws. As noted in Response 2, existing law (38 M.R.S.A., Section 413(1)) requires a license for the discharge of pollutants to surface or groundwaters of the State. The UIC requirements have been extensively communicated to municipalities for years, both in their capacities as government entities and as members of the regulated community. As stated above, this proposed rulemaking formally codifies the existing program and thus presents no new requirements to facilities.

Maine Automobile Dealers Association Comments:

*Comment 6:* MADA requests a public hearing on the proposed revisions to Chapter 543 and comments that “*the language of the proposed rules is confusing and difficult for a small business owner to understand. In addition, the proposed rules seem contradictory to requirements which (MEDEP) employees have imposed during prior inspections at Maine dealerships*”.

*Response 6:* The Department refers to Response 1, above. Through administering the UIC program, the Department has inspected and/or contacted 251 used and new car sales facilities to date. The Department’s records indicate that at this time, 100% of these facilities have been deemed in compliance with Maine’s UIC rules. Based upon its extensive contact with the regulated community through outreach efforts and facility inspections, as well as a very high rate of compliance, the Department believes that the public is well informed about these rules, that its ongoing outreach efforts assist any members of the public not as informed, and believes that a public hearing is not necessary.

*Comment 7:* MADA states “*there appears to be a significant conflict between the Maine Plumbing Code and these rules*”. MADA references Section 3(A), which prohibits subsurface discharges through wells except as authorized by Chapter 543, 38 M.R.S.A., Section 413(1-B), or the Maine Subsurface Wastewater Disposal Rules (Maine Plumbing Code) (10-144 CMR 241). MADA also references Section 3(B), which prohibits the discharge of pollutants into groundwater that cause or contribute to violations of groundwater, surface water, or drinking water classifications and standards.

*Response 7:* There is no conflict between Chapter 543 and the Maine Subsurface Wastewater Disposal Rules (Maine Plumbing Code). On the contrary, they are designed to work together. A major focus of the rule is to identify different types of wells and their appropriate regulatory category: prohibited (Section 3); required to obtain a Waste Discharge License (Section 4); authorized by Chapter 543 (Section 5); and covered by the Maine Plumbing Code (Section 6).

*Comment 8:* MADA states that Section 3(E) requires the regulated community to either hook up to the municipal sewer system or maintain a holding tank. MADA states that *“even though the DEP represented when posting these rules...that DEP was merely implementing its existing policy, the requirements of Section 3(E) are a significant change from the policy which DEP has given to dealerships. MADA believes that DEP needs to explain this apparent contradiction in policy to the regulated community.”*

*Response 8:* The Department refers to Response 1 above and maintains that there is no contradiction between this rule and its policies with the regulated community. The Department assumes the policy to which MADA refers relates to the discharge of uncontaminated water to the ground surface, which is raised and addressed in following comments.

*Comment 9:* MADA states *“this rule will have a fiscal impact on municipalities. If those facilities which are not currently hooked up to a municipal waste system are forced to do so in the future, there will be an increased volume of wastewater to the Publicly-Owned Treatment Works (POTW)”* through receipt of holding tank wastewater from those facilities that elect to install holding tanks and through direct contributions from those facilities that elect to discharge to the POTW.

*Response 9:* The Department assumes that MADA’s concern is primarily related to motor vehicle waste disposal wells (floor drains). The prohibition of these types of disposal wells is not new to this rule, as they are prohibited pursuant to Federal UIC rules (40 CFR, Part 144) as well as by the provisions of both 38 M.R.S.A., Section 543 (statute), Pollution and corruption of waters and lands of the State prohibited, and the 1983 version of Maine’s UIC rule, Chapter 543. Options for closure of these types of wells are included in Section 3(E) and include sealing the drain or maintaining the drain and connecting it to either a POTW or a holding tank. Most facilities choose to either simply seal the drain or to segregate hazardous material usage from the drain area so that the drain can continue to be used for the discharge of non-hazardous fluids, such as snow melt, rainwater, and external vehicle wash water, subject to Chapter 543.

*Comment 10: Section 1, Definition D, Discharge.* MADA states that the DEP requires facilities *“to seal drains in the dealership service area and squeegee any water out the door onto the pavement. Doesn’t this fall under their definition of disposing of pollutants*

*to the waters of the State? This water flows across the pavement and at some point comes in contact with the ground.”*

*Response 10:* Motor vehicle waste disposal wells are prohibited, as described in Response 9 above. Many facilities maintain a vehicle bay where no maintenance is conducted to provide for rain water runoff and snow melt prior to bringing the vehicle to a maintenance area. The Department has been informed that this practice provides for less fluid around the mechanic’s working area, so that it is less messy, safer, and minimizes the amount of contaminated fluid that needs to be disposed of. The Department has informed facilities that if they keep their melt bays free of contaminants, they can push the exterior melt water to the ground surface outside. The Department still advises against disposal methods below the ground surface that make detection and timely cleanup of unforeseen substance releases more difficult. This policy does not include wastewater within vehicle service areas, the discharge of which is prohibited to the ground surface, subsurface, or to waters of the State. For small facilities that do not have separate melt bays, the Department encourages those facilities to segregate their activities to the extent possible, utilize appropriate and common precautions and practices to prevent motor vehicle fluid spills, and maintain equipment and practices to enable prompt cleanup of any spills. With these provisions, the Department allows these types of facilities to push uncontaminated water to the ground surface outside as well. The Department considers this to be a reasonable and practical approach that is better for the environment than use of floor drains within service areas.

*Comment 11: Section 1, Definition E, Domestic Wastewater.* MADA asks, “*what is this trying to say?*”

*Response 11:* The definition of domestic wastewater is derived from the Maine Subsurface Wastewater Disposal Rules (Maine Plumbing Code).

*Comment 12: Section 1, Definition G, Fluid.* MADA states, “*this would include the waste water that DEP suggests dealerships squeegee out the door*”

*Response 12:* The definition of fluid is derived from the federal UIC rules and Maine’s original UIC rules. The Department refers to Response 10 above.

*Comment 13: Section 1, Definition J, Holding Tank.* MADA quotes an excerpt from the definition, “a holding tank may not discharge waste water to surface or groundwater or onto the surface of the ground” and states, “*Current DEP rules which require a facility to squeegee waste water from the floor (that has not been through a oil/water separator) directly to the pavement, and then let it flow to bare ground, seem to add more pollutants, not reduce*”.

*Response 13:* MADA excluded the first sentence of the definition which defines a holding tank as, “a closed, liquid-tight structure designed and used to receive and store wastewater for ultimate disposal at another site”. The second sentence from the definition that MADA quoted then appropriately follows. The Department does not have a rule that requires facilities to squeegee wastewater to the ground surface. The Department refers to Response 10 above.

*Comment 14: Section 1, Definition L, Non-domestic wastewater.* MADA asks, “*how does a person make such a distinction*”.

*Response 14:* The Department refers to the definition for domestic wastewater as the alternate to non-domestic wastewater. If a facility has difficulty determining the difference between domestic and non-domestic wastewater, staff from Maine DHHS Division of Environmental Health, who administer the State Plumbing Code, and staff from Maine DEP, who administer the UIC Program, will assist.

*Comment 15: Section 1, Definition Q, Subsurface wastewater disposal system.* MADA quotes an excerpt from the definition, “any system designed to dispose of waste or wastewater on or beneath the surface of the earth” and states, “*DEP’s required method of disposal (squeegee it out the door) is exactly what they are proposing a rule to diminish. It will run across the pavement and then into the ground*”.

*Response 15:* The definition of subsurface wastewater disposal system is derived from the Maine Subsurface Wastewater Disposal Rules (Maine Plumbing Code). The Department does not require facilities to squeegee wastewater to the ground surface. The Department refers to Response 10 above. There is a significant difference between a properly designed and approved subsurface wastewater disposal and treatment system and allowing snow melt to run across the ground surface.

*Comment 16: Section 1, Definition S, Well.* MADA states, “*the exclusion of a ditch or dug hole that is wider than it is deep seems confusing. Does this mean that your wastewater can go to a ditch that is 9 feet wide x 8 feet deep x 100 feet long?*”

*Response 16:* The Department points out that this is a definition of a well for the purpose of this rule and the federal UIC rules, from which it originates. The existing Maine UIC rules (effective 1983) contain a similar definition of well. The language in definition 1(s) does not approve the size ditch described by MADA for wastewater disposal, but merely excludes it from being considered a well for the purposes of Chapter 543. The discharge of wastewater to a structure that does not fit the definition of a well is still regulated by the Maine Subsurface Wastewater Disposal Rules (Maine Plumbing Code), 38 M.R.S.A., Section 413, Waste Discharge Licenses, and 38 M.R.S.A., Section 543 (statute), Pollution and corruption of waters and lands of the State prohibited.

*Comment 17: Section 2, Classification of Wells, Section E(4): MADA asks, “Does this mean that all retention ponds are now Class V wells?”*

*Response 17:* The definition of Well in the proposed rule, Section 1(s), specifically excludes retention basins.

*Comment 18: Section 2, Classification of Wells, Section E(11)(a): MADA asks, “Is snow melt from cars, trucks, snowmobiles and other motorized vehicles which goes down a floor drain really going to an injection well? This definition of an injection well seems to go way beyond the common sense definition.”*

*Response 18:* The Department points out that the definition of an injection well is for the purpose of this rule and the federal UIC rules. As stated above, both the federal UIC rules and the existing Maine UIC rules (effective 1983) define well in a similar manner. The section cited provides for this type of well to be licensed by rule, the most expedited regulatory process provided, an action the Department believes to be a common sense way of dealing with these situations.

*Comment 19: Section 3, Prohibited Discharges, Section B(1), Prohibition of movement of fluid into groundwater: MADA states, “this section seems to contradict current DEP requirements, which are ‘squeegee it out the door’. This is the same water in a holding tank that DEP wants pumped out and taken to a POTW.”*

*Response 19:* Section 3(B) prohibits the discharge of pollutants into groundwater that cause or contribute to violations of groundwater, surface water, or drinking water classifications and standards. As previously stated, the DEP does not require facilities to squeegee water out the door, but describes how this practice can be used to the facility’s advantage in an environmentally safe manner. The Department refers to Response 10 above. The concept is that this would not necessarily be the same water that would be routed to a holding tank. Facilities who utilize holding tanks are encouraged to separate their wastewater flows, using the holding tank to contain contaminated wastewater, thus minimizing disposal costs.

*Comment 20: Section 3, Prohibited Discharges, Section B(1)(a), Prohibition of movement of fluid into groundwater: MADA asks, “is licensure the purpose of this rule revision? Does DEP want all facilities that discharge wastewater to be licensed, pay a fee based on who knows what the criteria will be?”*

*Response 20:* The purpose of this rule is to ensure that all groundwater in the State of Maine “shall be free of radioactive matter or any matter that imparts color, turbidity, taste or odor which would impair usage of these waters, other than that occurring from natural phenomena” and that Class GW-A water “shall be of such quality that it can be



*used for public water supplies”, as established in Maine law, 38 M.R.S.A., Section 465-C, Standards of classification of groundwater. As previously explained, this rule identifies different types of wells and their appropriate regulatory category: prohibited (Section 3); required to obtain a waste discharge license (Section 4); authorized by Chapter 543 (Section 5); and covered by the Maine Plumbing Code (Section 6). The requirement to obtain a waste discharge license is only one possible outcome and the types of discharges that require a license are clearly documented. For those types of discharges, the license is intended to ensure that proper wastewater treatment and monitoring is provided such that the discharge does not cause or contribute to violations of groundwater, surface water, or drinking water classifications and standards. This not only protects waters of the State from contamination and prevents costly remediation efforts, but avoids liability for the facility. As described in Response 1 above and as evidenced by its high rate of compliance, the Department believes the basis for, and criteria of, Maine’s UIC program are well known.*

*Comment 21: Section 3, Prohibited Discharges, Section B(2), Prohibition of movement of fluid into groundwater: MADA asks, “would a business have to manage the soil that DEP told it to contaminate? DEP says: ‘squeegee it out the door’. The fluid travels across the pavement onto the ground and contaminates it.”*

*Response 21:* The DEP has not told any business to contaminate soil. The Department refers to Response 10 and other related responses above. In addition to this rule, the requirement to manage contaminated soil or other materials is specified in federal UIC rules as well as other applicable state and federal laws.

*Comment 22: Section 3, Prohibited Discharges, Section E(1)(c)(ii), Prohibition of certain Class V wells: MADA asks, “where would this apply? What facility would not have motor vehicle wastewater? Why would compliance history and proper disposal records show proof of compliance, when there are not records...?”*

*Response 22:* The Department believes that the full text of Section E(1) is self-explanatory. This section highlights both the prohibition of motor vehicle waste disposal wells and the opportunity for segregation of non-contaminated flows described in responses above. Demonstration that motor vehicle waste is unlikely to enter the well through the types of activities conducted in areas that contribute fluid to the well, the pollution prevention practices undertaken by the facility, and physical modifications, help determine the applicability of this option, which many facilities deem beneficial to them.

*Comment 23: Section 3, Prohibited Discharges, Section F, Prohibition of certain floor drain connections: MADA states, “this rule seems to say: ‘do not discharge by means of a pipe discharging to the top of the ground (daylighting). Instead squeegee the fluid out the door so it can drain across the pavement and onto the ground.”*

*Response 23:* The cited section states, “a floor drain may not be connected to a well, including a drywell or septic system, or to a pipe that discharges to the ground surface (also known as ‘daylighting’) if there is a significant potential for industrial, hazardous or toxic liquids or pollutants to discharge into the floor drain”. The Department believes this section to be straight-forward and self-explanatory. The Department does not advise facilities to discharge contaminated fluids to the ground surface and refers to Response 10 and other related responses above.